REMARKS

Reconsideration and allowance of the above-referenced application are respectfully requested.

I. STATUS OF THE CLAIMS

Claim 1 is amended herein.

Claims 4 and 6 are allowed.

In view of the above, it is respectfully submitted that claims 1-6 are currently pending and under consideration.

II. REJECTION OF CLAIMS 1-3 UNDER 35 U.S.C. §102(E) AS BEING ANTICIPATED BY ELLIS (US 5,953,138)

The present invention as recited in claim 1 (as amended herein), relates to an optical communication system having an optical gate, "wherein said optical gate converts said multiplexed light into said time division multiplexed signal light by performing gate operation between said multiplexed light and a probe light having said second wavelength."

Ellis teaches that "[t]he clock and NRZ format WDM data signals are amplified in erbium doped optical fiber amplifiers 720 and 722 which provide the necessary signal levels for subsequent stages: the clock signal is amplified to around 12 dBm and then the NRZ format signal between 1 to 3 dBm. The signals are then fed into a TWSLA 745 through a WDM coupler 740. The TWSLA 745 is a bulk device, with a coupling loss of ~6dB per facet." (See column 7, lines 57-64.)

However, the clock is not a probe light and the output of the TWSLA 745 is not a time division multiplexed signal light. Therefore, the TWSLA 745 of Ellis differs from the claimed optical gate as recited in claim 1.

Further, Ellis teaches that "[t]he dispersed signal is amplified by an amplifier 726 and is fed into a second TWSLA 770, through a WDM coupler 765, along with a cw reference signal amplified by an amplifier 724 and originating from an optically amplified DFB semiconductor laser 772. The WDM pulse stream is amplified to a mean optical power of +12 dBm and the co-propagating cw reference signal is amplified to a mean optical power of 4.9 dBm.

Optionally, a separate optically amplified counter-propagating (or co-propagating) cw DFB pump beam is injected into the second TWSLA 770, from a DFB semiconductor laser 775, to suppress the data patterning effects that might otherwise occur due to temporally non-uniform carrier density dynamics. The second TWSLA 770 is a polarization insensitive bulk-layer device with a peak wavelength of 1.54 µm. operating with a DC bias current of 200mA." (See column 8, lines 15-32.)

However, the output of the DFB semiconductor laser 772 is a cw reference signal and not a probe light as recited in claim 1 of the present invention. Moreover, the output of the DFB semiconductor laser 775 is a pump beam and not a probe light as recited in claim 1. Further, the TWSLA 770 does not perform gate operation between the multiplexed light and a probe light. Accordingly, the TWSLA 770 of Ellis differs from the claimed optical gate as recited in claim 1.

Therefore, Ellis does not teach or suggest the features recited in claim 1.

Claims 2 and 3 depend from claim 1. For at least the reasons that claim 1 distinguishes over the cited prior art, it is respectfully submitted that claims 2 and 3 also distinguish over the cited prior art.

In view of the above, it is respectfully submitted that the rejection is overcome.

III. CONCLUSION

In view of the foregoing amendments and remarks, it is respectfully submitted that each of the claims patentably distinguishes over the prior art, and therefore defines allowable subject matter. A prompt and favorable reconsideration of the rejection along with an indication of allowability of all pending claims are therefore respectfully requested.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: 8-11-05

By: Derrick L. Fields
Derrick L. Fields
Registration No. 50,133

1201 New York Ave, N.W., Suite 700
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501